

CLAIMS

What is claimed is:

1. A method for obtaining a client program grammar communication from
an Application Programming Interface (API) call, comprising:

obtaining the API call;

when metadata is associated with the API call,

obtaining the associated metadata; and

automatically determining a best estimation of the client program
grammar communication from the associated metadata and from
the API call; and

otherwise,

automatically obtaining a best estimation of the client program
grammar communication from the API call.
2. The method as recited in claim 1, wherein the API call is a .NET API call.
3. The method as recited in claim 1, wherein the client program grammar
communication is a Standard Commands for Programmable
Instrumentation (SCPI) communication.
4. The method as recited in claim 3, further comprising:

4 evaluating the obtained best estimation of the SCPI communication for
conformance of the best estimation of the SCPI communication to SCPI
specifications.

2 5. The method as recited in claim 4, further comprising:
when the obtained best estimation of the SCPI communication does not
4 conform to SCPI specifications, manually adjusting the obtained best
estimation of the SCPI communication to conform to SCPI specifications.

2 6. The method as recited in claim 3, further comprising:
evaluating the obtained best estimation of the SCPI communication for
4 conformance of the best estimation of the SCPI communication to
General-Purpose Interface Bus (GPIB) specifications.

2 7. The method as recited in claim 6, further comprising:
when the obtained best estimation of the SCPI communication does not
4 conform to GPIB specifications, manually adjusting the obtained best
estimation of the SCPI communication to conform to GPIB specifications.

2 8. A computer readable memory device embodying a computer program of
instructions executable by the computer, the instructions comprising:

4 obtaining an Application Programming Interface (API) call;

6 when metadata is associated with the API call,

8 obtaining the associated metadata; and

10 automatically determining a best estimation of a client program
grammar communication from the associated metadata and from
the API call; and

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otherwise,

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16 automatically obtaining a best estimation of the client program
grammar communication from the API call.

2 9. The computer readable memory device as recited in claim 8, wherein the
API call is a .NET API call.

2 10. The computer readable memory device as recited in claim 8, wherein the
client program grammar communication is a Standard Commands for
Programmable Instrumentation (SCPI) communication.

2 11. The computer readable memory device as recited in claim 10, the
instructions further comprising:

4 evaluating the obtained best estimation of the SCPI communication for
conformance of the best estimation of the SCPI communication to SCPI
6 specifications.

2 12. The computer readable memory device as recited in claim 11, the
instructions further comprising:

4 when the obtained best estimation of the SCPI communication does not
conform to SCPI specifications, manually adjusting the obtained best
6 estimation of the SCPI communication to conform to SCPI specifications.

- 2 13. The computer readable memory device as recited in claim 10, the
instructions further comprising:
- 4 evaluating the obtained best estimation of the SCPI communication for
conformance of the best estimation of the SCPI communication to
6 General-Purpose Interface Bus (GPIB) specifications.
- 2 14. The computer readable memory device as recited in claim 13, the
instructions further comprising:
- 4 when the obtained best estimation of the SCPI communication does not
conform to GPIB specifications, manually adjusting the obtained best
6 estimation of the SCPI communication to conform to GPIB specifications.
- 2 15. A system, comprising:
- 4 a generator module configured to receive an Application Programming
Interface (API) call, configured to obtain metadata when such metadata
is associated with the API call, and configured to automatically determine
6 a best estimation of the client program communication from the API call
and, when such metadata has been obtained, also from the associated
8 metadata.
- 2 16. The system as recited in claim 15, wherein the API call is a .NET API
call.
- 2 17. The system as recited in claim 15, wherein the client program grammar
communication is a Standard Commands for Programmable
Instrumentation (SCPI) communication.

18. The system as recited in claim 17, wherein the generator is further
2 configured to evaluate the obtained best estimation of the SCPI
communication with regard to conformance of the best estimation of the
4 SCPI communication to SCPI specifications.
19. The system as recited in claim 17, wherein the generator is further
2 configured to evaluate the obtained best estimation of the SCPI
communication with regard to conformance of the best estimation of the
4 SCPI communication to General-Purpose Interface Bus (GPIB)
specifications.
20. The system as recited in claim 19, wherein GPIB specifications are
2 specified by the Institute of Electrical and Electronic Engineers (IEEE)
specification number, IEEE 488.1.